

REMARKS

Claims 1-9 are all the claims pending in the application.

I. Claim Rejections under 35 U.S.C. § 103

Claims 1-9 are rejected under 35 U.S.C. § 103 as being unpatentable over Blanquer Gonzalez et al. (U.S. Publication No. 2003/0223428; hereinafter “Blanquer”) in view of Nemirovsky et al. (U.S. Publication No. 2002/0062435; hereinafter “Nemirovsky”). For at least the following reasons, Applicant respectfully traverses the rejection.

Claim 1 recites a scheduler device for scheduling the transmission of data “from a plurality of queues in a source node to a plurality of destination nodes via a plurality of outlet ports from said source node, each of said outlet ports being associated with a resource among a plurality of resources, the data being transmitted via said resource to at least one of said plurality of destination nodes, each of said plurality of destination nodes receiving data from all or some of said plurality of resources, said scheduler device comprising: a plurality of servers, each of said plurality of servers being associated with a respective one of the plurality of resources and each of said servers comprising a scheduler module which is independent for each of said servers.”

In the Amendment filed August 31, 2007, Applicant submitted that Blanquer fails to teach or suggest the claimed feature of each server comprising a scheduler module which is independent for each server, as recited in claim 1.

In response, the Examiner asserts that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to tell Blanquer’s scheduler provides similar

functionality as Blanquer's scheduler schedules the flows separately (paragraph 30), as if each server has its independent scheduler, as the scheduler proportionally share resources among the servers as further clarified and depicted in figure 9 and explained in paragraph 0075," (Office Action, pages 7-8).

The Examiner assertion that "Blanquer mention each server is independent from the scheduler 110 (paragraph 30)," (Office Action page 3) does not address this claimed feature. Blanquer is directed toward "proportional sharing of multiple servers among competing flows," (paragraph 29). The first sentence of paragraph 30 relates to a first approach of "partitioning the flows among the servers and scheduling them separately within each partition," (paragraph 30). However, this first approach is roughly outlined in only one sentence, and fails to enable a person skilled in the art to implement it. Blanquer's disclosure with respect to this approach is very deficient and fails to teach or suggest at least the claimed features of a plurality of queues in a source node, a plurality of destination nodes, and a plurality of outlet ports of said source node. Furthermore, Blanquer explicitly dismisses this approach as being disadvantageous and cumbersome, in favor of another approach discussed below.

The Examiner's alleges that Blanquer's flows_{1-M} disclose the claimed plurality of queues, and that Blanquer's output ports 120_{1-N} disclose both the claimed outlet ports and destination nodes. However, the Examiner's allegations are with respect to FIG. 1 of Blanquer, which is directed to another approach to sharing multiple servers than the one discussed above. Specifically, Blanquer discloses "an alternative approach to sharing muli-servers where a packet of any flow can be serviced at any of the servers," (paragraph 30). That is, Blanquer discloses

proportionally sharing multiple servers among competing flows with a central scheduler 110 that proportionally shares the multiple servers among the competing flows. In other words, Blanquer explicitly teaches away from a plurality of servers, each comprising a scheduler module which is independent for each of said servers.

Thus, Blanquer merely discloses flows_{1-M} and output ports 120_{1-N} with respect to an approach of a central scheduler 110 that is contrary to the claimed invention. While Blanquer discloses “partitioning the flows among the servers and scheduling them separately within each partition,” Blanquer fails to teach or suggest at least the claimed features of a plurality of queues in a source node, a plurality of destination nodes, and a plurality of outlet ports of said source node, with this approach, and furthermore explicitly teaches away from this approach.

With respect to the claimed “plurality of servers being associated with a respective one of the plurality of resources,” the Examiner acknowledges that Blanquer fails to teach or suggest this feature, as recited in claim 1. Instead the Examiner relies on Nemirovsky to disclose this claimed feature. Specifically, the Examiner refers to the disclosure of Nemirovsky that a queue may be dedicated to one or a set of resources (paragraph 40).

In the Amendment filed August 31, 2007, Applicant submitted that Nemirovsky merely discloses that “**a queue** may be dedicated to one or a set of resources,” (paragraph 40), and that if Blanquer and Nemirovsky were combined, the combination would merely result in the flows_{1-M} (which the Examiner alleges correspond to the claimed queues) being dedicated to one or a set of resources. In response, the Examiner asserts that FIG. 1 of Nemirovsky “is obvious to be applied as a server in transmitting data from a source node / or source (e.g threads 1-3 enters processor)

to a ‘destination and output (combined)’ which are resources 10-13,” (Office Action, page 8). The Examiner seems to be asserting that the resources 10-13 of Nemirovsky disclose both the claimed output ports as well as the claimed destination nodes, and the transmission of data from the threads 1-3 to the resources 10-13 discloses the claimed transmission of data.

Firstly, Applicant respectfully submits that Nemirovsky fails to teach or suggest transmitting data via the resources to the destination nodes as asserted by the Examiner. Nemirovsky merely discloses the utilization of the resources 10-13 when executing instructions from threads 1-3 (paragraph 38). Nemirovsky refers to the resources 10-13 as “functional resources” in the context of scheduling instructions to be executed in a processor (paragraph 36). Accordingly, the instructions to be executed may be stored in a memory, and the functional resource may perform some function on the data values of these instructions stored in the memory. When Nemirovsky discloses that “a queue may be dedicated to one or a set of resources”, Nemirovsky is merely stating that instructions stored in certain queues may require certain resources in order to be executed. In no way does Nemirovsky teach or suggest transmitting data *via* the resources *to* the destination node as asserted by the Examiner. In other words, in Nemirovsky, resources are function units that execute a function and not a channel that provide data to another node.

Secondly, even assuming that the Examiner’s assertions are correct, claim 1 further recites that the data is transmitted from a source node to a destination node via an outlet port and a corresponding resource. That is, data is transmitted from a queue of a source node to a destination node via an outlet port of said source node and a corresponding resource. Clearly, if

the resources of Nemirovsky correspond to both the claimed outlet port and the claimed destination node, then data cannot be transmitted from the resource to itself via itself, as this is illogical. Thus, Nemirovsky fails to teach or suggest at least these claimed features.

Accordingly, the combination of Blanquer and Nemirovsky fails to teach or suggest all of the claimed features recited in claim 1. Thus, Applicant respectfully submits that claim 1 is patentable over the applied references. Applicant further submits that claims 2-9 are patentable at least by virtue of their dependency on claim 1.

II. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Nataliya Dvorson/
Nataliya Dvorson
Registration No. 56,616

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

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